

time that the various agencies having to do with medical work in the state of Indiana, whether relating to teaching, practice, or public health work, should get together in a spirit of co-operation to accomplish the best results without treading upon each other's toes or minimizing the good secured by antagonizing each other. Up to the present time, it would seem that the State Board of Health draws no distinction between those which clearly are public health matters and those which many of us believe have nothing to do with public health matters. A better understanding of this whole situation is needed in order to bring about that spirit of co-operation and helpfulness required for the development of everything pertaining to health, whether it be public or private."

### ADVERTISING

Public opinion is rapidly getting a new idea of the value and uses of well-designed advertising matter. In many of the leading magazines of this country the most valuable information contained in them is in the dignified, careful wording and informative copy furnished by advertisers occupying paid space. This is coming to be more and more true of advertisers in medical journals as well.

Worthwhile acceptable advertisers no longer, as a rule, waste their paid space by extolling the superiority of their products over those of the other fellow. They make a dignified, and, if they are wise, truthful appeal for their products, regardless of what anyone else may say, based upon their merits, as they honestly believe them to be.

CALIFORNIA AND WESTERN MEDICINE encourages wherever it can this form of appeal by its advertisers, and we believe that readers will find profit to themselves in carefully perusing the advertising pages, as most of them already do in looking over and reading many other current non-medical magazines. Members will often secure information of interest and at the same time *always* increase the value of CALIFORNIA AND WESTERN MEDICINE as an advertising medium, and thus decrease its cost, as reflected in annual dues, by filling out coupons or sending for other literature when such offer is made by the advertiser. Some advertisers still interpret—we think unwisely—the value of advertising to them by the response they get from coupons published in paid space.

### HOSPITALS AS AGENCIES OF SCIENTIFIC MEDICINE

On account of the local hospital problem at Whittier, already discussed in CALIFORNIA AND WESTERN MEDICINE, Doctor H. P. Wilson, member of the board of directors of that hospital, sent a questionnaire to the secretary of the county medical society of each county. In it he asked two questions: "(1) *Is there any osteopathic or chiropractic hospital, managed and conducted by these people in your county?* (2) *If not, into what hospital in your county are the osteopaths and chiropractors permitted to practice, and under what conditions?*"

In brief, the various answers are as follows:

Doctor Pauline Nusbaumer of Alameda County says that there are no chiropractic or osteopathic hospitals in the county. Out of eight of the leading hospitals, six do not permit osteopaths to bring or give treatments to patients; one allows osteopaths

to give treatments if requested by one of the regular physicians.

Doctor J. O. Chiapella of Butte County answers no to both questions.

So does Doctor L. St. John Hely of Contra Costa County.

Doctor C. L. Terrill of Glenn County answers no, and so does Doctor Lawrence A. Wing of Humboldt County.

Doctor Francis P. Elliott of Imperial County says that there are no osteopathic or chiropractic hospitals, but osteopaths are allowed in — hospital.

Doctor W. H. Morse of Kern County says that osteopaths who are licensed physicians and surgeons are permitted to take patients to their hospitals.

Doctor G. S. Martin of Lassen-Plumas Counties answers no to both questions, and adds that "there is one chiropractor, no osteopath, and one Abrams' believer in both counties."

Doctor Harlan Shoemaker of Los Angeles County says there is one osteopathic hospital owned and controlled by osteopaths in the county, and "to the best of his knowledge there is no other hospital which accepts patients from osteopaths, and most certainly not from chiropractors."

Doctor P. J. Bowman of Mendocino County answers no to both questions.

Doctor Brett Davis of Merced County answers no to both questions, and so does Doctor H. R. Coleman of Napa County.

Doctor Rowland P. Yeagle of Orange County says that there are no osteopathic or chiropractic hospitals in the county. Chiropractors are not admitted into the hospitals at any time, but that osteopaths through referred work sometimes get into some of the hospitals.

Doctor Robert A. Peers of Placer County answers no to both questions.

Doctor Thomas C. Card of Riverside County replies that there are no osteopathic or chiropractic hospitals in the county. "At the present time osteopaths have been admitted to the Community Hospital, but this privilege has only been taken advantage of occasionally." He says that the board of directors have recently passed a resolution prepared by the Council on Medical Education and Hospitals of the American Medical Association which specifically prohibits any but adequately educated physicians practicing in an accredited hospital. This they intend to enforce.

Doctor E. J. Holland of Sacramento County answers no to both questions, as does Doctor C. W. Merrill of San Benito County.

Doctor H. S. Chapman of San Joaquin County answers no to the first question, and states that osteopaths who have physician and surgeon's license, "I am sorry to say are admitted into both hospitals. Chiropractors are not permitted to practice in the hospitals."

Doctor William O. Calloway of San Mateo County answers no to both questions, and adds "nor are they allowed to practice in our hospitals under any consideration. This is something that the Medi-

cal Society of our county would not tolerate, nor do I imagine it would be tolerated by the society in any other county."

Doctor G. David Kelker of San Luis Obispo County answers no to the first question and says in reply to the second, "There is, however, a sanatorium to which the osteopaths, chiropractors, and naturopaths seem to have permission to practice and to which they send many patients. I do not know of any other hospital in the county in which the osteopaths and chiropractors are permitted to practice."

Doctor Philip C. Means of Santa Barbara County answers no to both questions.

Doctor H. G. Watters of Santa Cruz County answers no to both questions, and so does Doctor C. A. Mueller of Shasta County.

Doctor E. J. Eytinge of San Bernardino County answers no to the first question, but says: "The — hospital of — and the hospitals in San Bernardino are open to osteopaths. I have never heard of a chiropractic taking a case to a hospital, but I have no doubt that as far as any treatment that is legal for a chiropractic to give, such a case would be admitted as are the osteopaths."

Doctor L. H. Redelings of San Diego County answers no to both questions, and in speaking of the second question adds: "I might qualify this last statement by saying that, to my knowledge, on a few occasions I have seen osteopathic physicians in some of the small private sanitoriums, but this is by no means the rule in San Diego County and is not countenanced by the San Diego County Medical Society."

Doctor A. V. Doran of Solano County answers no to both questions.

Doctor N. Juell of Sonoma County says there is one hospital run by an osteopath, and that one osteopath is on the staff of another hospital, and still another practices in a number of hospitals.

Doctor E. R. McPheeters of Stanislaus County answers no to both questions, and adds: "For your information there are six hospitals in this county, and none of them allows any but regular M. D.'s. We never heard of an osteopath or a chiropractor conducting a hospital."

Doctor Norman C. Paine of Tulare County says no to the first question, and answers the second one by saying: "The osteopaths, with a physician and surgeon's license, do take their patients into some of the hospitals or have surgeons do so."

Doctor D. L. Hood of Tuolumne County answers as follows: "Osteos and chiros can send their patients to one of two private hospitals in this county, *I presume*. Our county hospital is reserved for paupers only, where the county physician treats."

Doctor Lela J. Beed of Yolo County answers no to both questions and says: "The only such hospital I know of is a small one owned and conducted by an osteopath and a supposed chiropractor at — in Colusa County. The Woodland Sanitarium permits only reputable physicians to have patients in the hospital."

Doctor A. L. Miller of Yuba-Sutter Counties answers no to both questions.

## ANIMAL POISONS

The interest in poisons and agents of animal origin in their varied relations to medicine continues unabated from ancient times down to the present day. It can easily be seen why this is so. The aboriginal mind, undoubtedly impressed with the striking effects of these products and the animals elaborating them, ascribed to them powers, well-nigh supernatural, whether from superstition, or for utilization of them in its struggle with other creatures of this globe. In fact, certain of the products or their organs became the objects of religious worship. Aboriginal medicine, if such it may be termed, had its day. Refined modern medicine is having its own, seeking to unravel, and to master the virtues of, these agents. Truly the advance of the modern investigator over the simple curiosity of the aborigines has been great. Flury of Würzburg calls our attention to the attainments along this line, pointing out especially the nature of the constituents that have been isolated from animal products.

Striking, indeed, is the array of constituents in animal poisons. Some are definite chemical compounds, others are well-characterized chemical substances, still others, however, are ill-defined. Flury enumerates the following: formic acid in bees, picrotoxin in *cocculus indicus*, cantharidin in Spanish fly, proteoses in snake venom, hirudin in leeches, oxyphenylethylamine (tyramine) in saliva of cephalopods, bufotalin and bufagin (epinephrine-like in its action in toad's skin. Most intestinal worms give off poisons to the body. The eggs of eels, starfish, spiders, beetles, bees, turtles, frogs, snakes, and certain fishes are toxic, but the nature of the poisons is unknown. To the chemically unknown and unisolated class may be added toxins and anti-toxins, the extracts of several endocrine glands (pituitary, testis, ovary, parathyroid, and perhaps thymus and pineal). The few endocrines whose active constituents are known are the adrenal and its epinephrine, the thyroid and its thyroxin, the pancreas and its insulin. The brain, too, has an active constituent, namely, kephalin, a powerful accelerator of blood coagulation. The urine is well known to be toxic, and the blood of one species is poisonous to another, and tissue extracts in general possess toxic actions. Among toxic serums should be mentioned especially eel, human and beef serums. Nor are these products mere curiosities or poisons; they have helped to reveal biological phenomena of fundamental importance. Anaphylaxis began with Magendie's toxic injections of egg-white into animals, and received its name from Richet's experiments with the poisons of the sea-anemone, an animal-flower that lives in the sea. Recently, Ackerman has isolated tetramethylammonium hydroxide from the sea-anemone, a compound which possesses a curare-like action. Then there are the hemolysins, agglutinins, precipitins, etc., all animal poisons.

Not all animal poisons are poisons in the ordinary sense of the word, i. e., injurious to health or destructive to life, although any one of the animal products may become so if used in overdosage. For example, powdered thyroid and thyroxin within certain limits act beneficially, but in overdosage they tend to produce goiterous phenomena. According to